GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA

UNSTARRED QUESTION NO:6285
ANSWERED ON:12.04.2017
Research and Development
Mishra Shri Bhairon Prasad

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) the details of the remarkable progress made in the Science and Technology (S&T) sector in the country during the last three years;

(b) the global ranking of the country in the said sector along with the details thereof;

(c) the targets set in this regard for the current year; and

(d) the details of the action plan formulated in this regard?

Answer

MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES
(SHRI.Y. S. CHOWDARY)

(a) Remarkable progress has been made in the Science and Technology (S&T) sector in the country during the last three years through collective efforts of Departments/Agencies such as Department of Science and Technology (DST), Department of Biotechnology (DBT), Department of Scientific and Industrial Research (DSIR), Council of Scientific and Industrial Research (CSIR), Department of Space, Department of Atomic Energy, Defence Research Development Organization (DRDO). Special thrust has been given in technology development and commercialization for the society, industry and the strategic sector, creation of S&T based entrepreneurship and participation in the national Skill Development initiative. Significant progress has been reported in sectors namely, Space Technology, Energy & Environment, Advanced Materials, Value added Agriculture, Healthcare, Food & Nutrition, Water, Waste to Wealth, Skill development etc. Noticeable progress has been made in implementing the National Supercomputing Mission (NSM) of DST in partnership with Ministry of Communications and Information Technology (MeitY) to build capacity and capability in supercomputing. Significant progress has been reported from programmes of MeitY in the area of new radio interfaces for 5G, narrowband IOT, Cloud Radio Access Networks (RAN) etc.

(b) Though there are reports of outcome based ranking of countries in certain disciplines of S&T, no authentic and acceptable ranking system is developed to assess performance of countries in sectors of varied nature in a global platform. However, India is positioned well in many areas including strategic sectors. Indian's leadership in Space S&T was demonstrated by Indian Space Research Organization (ISRO) with a launch of a record high of 104 satellites in one go on a single rocket. CSIR is recognized to be among the international leaders in knowledge creation and it is ranked 12th in the world amongst the government institutions. Sixth position of India in scientific publications, 3rd in nanoscience and technology and in Chemistry demonstrate the progress of basic research in the country. A report of Springer Nature has indicated that India is ascending towards world-class science and our country is at 13th position globally on an index of world-class scientific journals.

(c) & (d): Several R&D projects have been identified for implementation in the current year. DRDO is targeted to implement several projects including EM gun powered by a capacitor bank, polymeric coating for mitigation of blast effects, bioremediation technology, scaling laws for explosion in tunnel etc. to scale up its activities. About 30 High Tech Skill/Training programmes are being launched by CSIR for imparting skills to over 5000 candidates annually. The skill development programmes cover areas like Leather Process Technology; Leather Footwear & Garments; Paints & coatings for corrosion protection; Electroplating & Metal Finishing; Lead Acid Battery maintenance; Glass Beaded Jewellery / Blue Pottery; Industrial Maintenance Engineering; Internet of Things (IoT); and Regulatory − Preclinical Toxicology. Ministry is addressing national goals and Missions such as Swachh Bharat, Swastha Bharat, Samarth Bharat, Make in India, Innovate for India, Start-up India, Skill India etc. Appropriate action plan is formulated to implement these Programmes with known timelines and targets.

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